ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 63

[Docket ID No. OAR-2002-0043; FRL-]

RIN 2060-AH03

National Emission Standards for Hazardous Air Pollutants for Primary Magnesium Refining

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: This action promulgates national emission standards for hazardous air pollutants (NESHAP) for primary magnesium refining facilities. The EPA has identified primary magnesium refining facilities as a major source of hazardous air pollutant (HAP) emissions. The NESHAP implement section 112(d) of the Clean Air Act (CAA) by requiring all major sources to meet HAP emission standards reflecting application of the maximum achievable control technology (MACT).

The HAP emitted by facilities in the primary magnesium refining source category include chlorine, hydrochloric acid, dioxin/furan, and trace amounts of several HAP metals. Exposure to these substances has been demonstrated to cause adverse health effects, including chronic and acute disorders of the blood,

heart, kidneys, reproductive system, and central nervous system. Some of these pollutants are considered to be carcinogens, and all can cause toxic effects in humans following sufficient exposure.

EFFECTIVE DATE: [INSERT DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER].

ADDRESSES: The official public docket is the collection of materials used in developing the final rule and is available for public viewing at the EPA Docket Center (EPA/DC), EPA West, Room B-102, 1301 Constitution Ave., NW, Washington, DC 20460.

FOR FURTHER INFORMATION CONTACT: Lula Melton, Metals Group, Emission Standards Division (C439-02), U.S. EPA, Research Triangle Park, NC 27711, telephone number (919) 541-2910, electronic mail address: melton.lula@epa.gov.

SUPPLEMENTARY INFORMATION:

Regulated Entities. Categories and entities potentially regulated by this action include:

Category	\mathtt{NAICS}^1	Examples of regulated entities
Industry	331419	Primary refiners of nonferrous metals (magnesium) by electrolytic methods.

¹North American Industry Classification System

This table is not intended to be exhaustive, but

rather provides a guide for readers regarding entities likely to be regulated by this action. To determine whether your facility is regulated by this action, you should examine the applicability criteria in §63.9881 of the final rule. If you have any questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding FOR FURTHER INFORMATION CONTACT section.

Docket. The EPA has established an official public docket for this action including both Docket ID No. OAR-2002-0043 and Docket ID No. A-2002-0027. The official public docket consists of the documents specifically referenced in this action, any public comments received, and other information related to this action. All items may not be listed under both docket numbers, so interested parties should inspect both docket numbers to ensure that they have received all materials relevant to the final rule. Although a part of the official docket, the public docket does not include Confidential Business Information or other information whose disclosure is restricted by statute. The official public docket is available for public viewing at the EPA Docket Center (Air Docket), EPA West, Room B-102, 1301 Constitution

Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air Docket is (202) 566-1742.

Electronic Docket Access. You may access the final rule electronically through the EPA Internet under the "Federal Register" listings at

http://www.epa.gov/fedrgstr/.

An electronic version of the public docket is available through EPA's electronic public docket and comment system, EPA Dockets. You may use EPA Dockets at http://www.epa.gov/edocket/ to view public comments, access the index of the contents of the official public docket, and to access those documents in the public docket that are available electronically. Although not all docket materials may be available electronically, you may still access any of the publicly available docket materials through EPA Dockets. Once in the system, select "search," then key in the appropriate docket identification number.

Worldwide Web (WWW). In addition to being available in the docket, an electronic copy of the final rule will

also be available on the WWW through the Technology Transfer Network (TTN). Following signature, a copy of the final rule will be posted on the TTN's policy and guidance page for newly proposed or promulgated rules at http://www.epa.gov/ttn/oarpg. The TTN provides information and technology exchange in various areas of air pollution control. If more information regarding the TTN is needed, call the TTN HELP line at (919)541-5384. Judicial Review. Under CAA section 307(b)(1), judicial review of the final NESHAP is available only by filing a petition for review in the U.S. Court of Appeals for the District of Columbia Circuit by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL_REGISTER]. Only those objections to the NESHAP which were raised with reasonable specificity during the public comment period may be raised during judicial Under CAA section 307(b)(2), the requirements established by today's final action may not be challenged separately in any civil or criminal proceeding brought by the EPA to enforce these requirements.

Outline. The information presented in this preamble is organized as follows:

- I. Background
- II. Summary of the Final Rule

- A. What are the affected sources and emission points?
- B. What are the compliance deadlines?
- C. What are the emission limitations and work practice standards?
- D. What are the operation and maintenance requirements?
- E. What are the initial compliance requirements?
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- G. What are the notification, recordkeeping, and reporting requirements?
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- C. Regulatory Flexibility Act
- D. Unfunded Mandates Reform Act
- E. Executive Order 13132: Federalism
- F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments
- G. Executive Order 13045: Protection of Children from Environmental Health & Safety Risks
- H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use
- I. National Technology Transfer Advancement Act
- J. Congressional Review Act

I. Background

Section 112 of the CAA requires us to list categories and subcategories of major sources and area sources of HAP and to establish NESHAP for the listed source categories and subcategories. The category of major sources covered by today's final NESHAP for Primary Magnesium Refining, was listed on July 16, 1992 (57 FR 31576). Major sources of HAP are those that emit or have the potential to emit greater than 10 tons per year (tpy)

of any one HAP or 25 tpy of any combination of HAP.

Additional information on the NESHAP development process can be found in the preamble to the proposed rule (68 FR 2970).

We received one letter with substantive comments on the proposed NESHAP. Today's final rule reflects our full consideration of the comments we received.

Additional information is available in the Response to Comments document in Docket No. OAR-2002-0043.

In addition to responding to comments, we made two minor clarifications from the proposed rule that are discussed in the final rule summary. These minor clarifications are not new requirements but simply ensure consistency in the final rule.

II. Summary of the Final Rule

A. What are the affected sources and emission points?

The affected source is each new or existing primary magnesium refining facility. An existing affected source is one constructed or reconstructed on or before January 22, 2003. We have identified one existing affected source (US Magnesium Corporation) that will be subject to the final rule. This plant produces magnesium from brine (salt water) taken from the Great Salt Lake. A new

affected source is one constructed or reconstructed after January 22, 2003. The final rule covers emissions from spray dryers, the melt reactor system, the launder offgas system, and magnesium chloride storage bins. The final rule also covers fugitive dust emissions.

B. What are the compliance deadlines?

The owner or operator of an existing affected source must comply by [INSERT DATE 12 MONTHS AFTER PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER]. New or reconstructed sources that startup on or before [INSERT DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER] must comply by [INSERT DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER]. New or reconstructed sources that startup after [INSERT DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER] must comply upon initial startup.

C. What are the emission limitations and work practice standards?

The final rule includes mass rate emission limits in pounds per hour (lbs/hr) for chlorine, hydrochloric acid (HCl), particulate matter (PM), and particulate matter less than 10 microns (PM $_{10}$). Additional emission limits in grains per dry standard cubic foot (gr/dscf) apply to

magnesium chloride storage bins. We clarified that both the mass emission rate limit and concentration limit for PM_{10} and HCl apply to emissions from magnesium chloride storage bins. This clarification was made to be consistent with the requirements in the current operating permit for the affected source. The emission limits are shown in Table 1 of this preamble.

TABLE 1. MASS RATE EMISSION LIMITS (lbs/hr)

Emission point	Chlorine	HCl	PM	PM ₁₀
Spray dryers		200	100	
Magnesium chloride storage bins ¹		47.5		2.7
Melt/reactor system	100	7.2		13.1
Launder off- gas system	26.0	46.0	37.5	

 $^{^{\}rm 1}$ Additional limits are 0.35 gr/dscf of HCl and 0.016 gr/dscf of $PM_{\rm 10}.$

The final rule also includes an emission limit for each melt/reactor system of 36 nanograms of dioxin/furan toxicity equivalents per dry standard cubic meter (ng TEQ/dscm) corrected to 7 percent oxygen. Dioxins/furans include a group of 17 chemicals or congeners that share certain similar chemical structures and biological characteristics. The 2,3,7,8-tetrachlorodibenzo-p-dioxin

(TCDD) congener is the most well studied and the most toxic of these compounds. Scientists believe that dioxins cause effects in similar ways. Because of this and because exposure is typically to variable mixtures of dioxin-like compounds, we use toxicity equivalency factors (TEF) that compare the potential toxicity of each of the individual dioxin-like compounds to the relative toxicity of TCDD. With such factors, the toxicity for a mixture can be expressed in terms of its TEQ, which is the amount of TCDD it would take to equal the combined toxic effect of all the dioxin-like compounds found in the mixture. To calculate the TEQ, the concentration of each dioxin-like compound is multiplied by its respective We examined a beyond-the-floor alternative for dioxins/furans and determined that the high cost coupled with the small reduction in dioxin/furan emissions does not justify the beyond-the-floor alternative.

The emission limitations include operating limits for control devices. All owners or operators using a wet scrubber to meet an emission limit in the final rule must establish and meet operating limits for pressure drop and scrubber water flow rate.

The work practice standards require owners or

operators to prepare a written plan that describes the measures that will be used to control fugitive dust emissions from all unpaved roads and other unpaved operational areas. The fugitive dust emissions control plan must be approved by the Administrator, and the requirement to operate according to the provisions in the plan must be incorporated by reference in the title V operating permit. In the final rule, we clarified the compliance and recordkeeping requirements for the fugitive dust control plan to be consistent with the work practice requirements in general, such as those in the operation and maintenance plan. The control of fugitive dust emissions will reduce PM which is a surrogate for metal HAP.

D. What are the operation and maintenance requirements?

All owners or operators of plants subject to the final rule are required to prepare and implement a written startup, shutdown, and malfunction plan according to the requirements in §63.6(e) of the NESHAP General Provisions (40 CFR part 63, subpart A). A written operation and maintenance plan is also required for control devices subject to an operating limit. The plan must describe procedures for monthly inspections and

preventative maintenance requirements for control devices.

E. What are the initial compliance requirements?

The final rule requires a performance test for each control device to demonstrate initial compliance with the applicable emission limits of chlorine, HCl, PM, PM₁₀, and dioxin/furan. The EPA Method 26 or 26A in 40 CFR part 60, appendix A, is the reference method for chlorine and HCl. The reference method for PM is EPA Method 5 or 5D in 40 CFR part 60, appendix A. The reference method for PM₁₀ is EPA Method 201 or 201A in 40 CFR part 60, appendix A. The EPA Method 23 of 40 CFR part 60, appendix A, is the reference method for dioxin/furan. The final rule also requires owners or operators to establish operating limits for scrubber pressure drop and scrubber water flow rate concurrent with the initial performance tests.

F. What are the continuous compliance requirements?

The final rule requires primary magnesium refineries to conduct performance tests at least twice during each title V operating permit term (at midterm and renewal) to demonstrate continuous compliance with the emission limits. Owners or operators are also required to monitor operating parameters for control devices subject to

operating limits and carry out the procedures in their fugitive dust emissions control plan and their operation and maintenance plan.

For wet scrubbers, owners or operators are required to use continuous parameter monitoring systems (CPMS) to measure and record the hourly average pressure drop and scrubber water flow rate. To demonstrate continuous compliance, owners or operators must keep records documenting conformance with the monitoring requirements and the installation, operation, and maintenance requirements for CPMS.

G. What are the notification, recordkeeping, and reporting requirements?

We selected the notification, recordkeeping, and reporting requirements to be consistent with the NESHAP General Provisions (40 CFR part 63, subpart A). One-time notifications are required by EPA to know what facilities are subject to the final standards, if a facility has complied with the final rule requirements, and when certain events such as performance tests are scheduled. Semiannual compliance reports containing information on any deviation from the final rule requirements are also required. These reports include information on any

deviation that occurred during the reporting period; if no deviation occurred, only summary information is required. Consistent with the NESHAP General Provisions, we also require an immediate report of any startup, shutdown, or malfunction where the actions taken in response were not consistent with the startup, shutdown, and malfunction plan. This information is needed to determine if changes need to be made to the plan.

By-passing the control device for maintenance activities is not considered a startup, shutdown, or malfunction event. Records of information needed to document compliance with the final rule requirements are required. These notifications, reports, and records are the minimum needed to ensure initial and continuous compliance.

III. Summary of Responses to Major Comments

We received substantive comments from only one commenter, and this commenter represents the primary magnesium plant affected by the final rule.

<u>Comment</u>: The commenter stated that a dioxin/furan emission limit is not appropriate for the primary magnesium industry because EPA has applied these limits primarily to facilities that burn wastes. Other industries, such as petroleum refineries and iron and

steel foundries, are known to emit dioxin/furan; however, EPA did not propose limits for them. The commenter also stated that the dioxin/furan limit cannot be justified on the basis of health risk because the facility is in a remote location, and the nearest resident is 25 miles away. The commenter recommended that EPA use PM as a surrogate for dioxin/furan emissions from the melt reactor because: EPA established MACT for dioxin/furan as the PM control devices on the melt reactor, PM is used as a surrogate for other pollutants in the final rule and has been used as a surrogate for dioxin/furan in other rules, the dioxin/furan emissions are mainly in particulate form, the dioxin/furan limit will obtain no additional reduction beyond that obtained using PM as a surrogate, and the dioxin/furan limit will add significantly to the cost of stack testing with no apparent gain.

Response: We set a dioxin/furan limit because it is a HAP of concern with respect to toxicity. We have adequate test data (two tests composed of three runs each) to characterize emission control performance, and dioxin/furan formation and control is not always correlated to PM formation and control. First, the

formation of dioxin/furans in combustion devices with an available source of chlorine is well documented, and it is not a concern only for facilities that burn waste. test data from this industry confirm the formation and emissions of dioxin/furans from this emissions source. Second, we do not agree that the control device for PM will adequately control the emissions of dioxin/furans. There are factors other than the PM control device which may affect the formation and control of dioxin/furan, such as the composition and concentrations of precursors, temperature, and process conditions. Dioxins are formed in acid gases leaving the combustion device, and the means of control is not necessarily the particulate control system but quenching of gases to control the temperature in the device (to assure that temperature does not fall in the range which optimizes dioxin/furan formation).

The MACT control system for dioxin/furans is the entire scrubber train--the packed tower scrubbers (for HCl control) and the venturi scrubber (for PM control)--and not just the PM control device. That is, the control of dioxin/furans includes the rapid cooling of the exhaust gas that occurs in the packed tower absorbers, which limits the dioxin/furan formation. Therefore, we believe

a dioxin/furan limit is necessary to ensure that process and control device operations do not change in the future in a manner that might increase the formation and release of dioxin/furan, even if the overall PM control level remains the same.

The dioxin/furan emission limit is not based on a determination that health risks exist; it is based on technology and the floor level of control that has been achieved. Stack testing every 2.5 years is not costly or unreasonable to provide assurance that the dioxin/furan limit is being achieved. Moreover, the commenter did not provide any information as to how this stack testing will add significantly to the costs of compliance with the final NESHAP.

Comment: The commenter disagreed with the approach used to set the emission limit for dioxin/furan and claimed it does not provide a reasonable margin of safety to ensure continuous compliance. The commenter suggests that a limit of 50 ng TEQ/dscm is statistically valid.

However, the commenter recommended that a minimum safety factor of three be applied to the average of results from the two stack tests (21.5 ng TEQ/dscm) to develop a limit of 65 ng TEQ/dscm rather than a limit of 36 ng TEQ/dscm as

proposed. The commenter stated this is reasonable because of the high variability in the test results and because of the inherent inaccuracies in the dioxin/furan sampling and analysis, especially at these extremely low levels of detection.

Response: We chose 36 ng TEQ/dscm because it was the highest result from any of the six runs. This approach accounts for inherent variability, and an additional margin of safety is provided by determining compliance from the average of three runs. The commenter estimated the 99th percentile for single test runs. The variability of the average of three runs is more appropriate than the variability of a single test run because compliance is determined from the average of three test runs rather than for each single test run.

To illustrate the impact of using the average of three runs, we performed a Monte Carlo simulation of 5,000 runs based on a normal distribution developed from the test results for six runs. From the simulation, the 99th percentile for individual runs was 44 ng TEQ/dscm compared to a 99th percentile of 32 ng TEQ/dscm for the average of three runs. Consequently, since the emission limit is enforced based on three-run averages, the

proposed limit of 36 ng TEQ/dscm is close to the 99th percentile of performance. We believe that the limit as proposed (and included in the final rule) is achievable, and the simulation indicates it accounts for variability.

The commenter mentioned process variability and uncertainty associated with sampling and analysis as reasons for a higher limit. However, the variability in the process, sampling, and analysis are inherently included in the runs we used to derive the limit and using the highest run accommodates this variability. In addition, there is no need to artificially increase the limit by multiplying the average of the test results by three because the statistical simulation shows that the proposed limit is reasonable. With testing performed every 2.5 years and a limit at about the 99th percentile, the limit would be exceeded no more than once every 250 years if the process and control device are operated as they were during the two performance tests.

While we were evaluating the data discussed by the commenter, we discovered an error in the 1998 test report. The test contractor inadvertently switched the TEF for two congeners. The net effect is that the overall average for six runs is 18 ng TEQ/dscm instead of

21.5 ng TEQ/dscm. This correction had no effect on the highest run and did not change the limit that was originally proposed.

<u>Comment</u>: The commenter stated that the World Health Organization's 1998 TEF scheme should be used to assign toxic equivalency, and this scheme should be stated in the final rule.

Response: Based on our dioxin reassessment report, we agree with the commenter and have incorporated the updated TEF scheme in the final rule. The effect on the test results was small, and the highest run remained at 36 ng TEQ/dscm. Consequently, the level of the final standard remains as proposed.

IV. Summary of Environmental, Energy and Economic Impacts

Generally, we do not expect the impacts of the final rule to be very significant. Currently, the one operating primary magnesium plant has all of the required air pollution control equipment in place and operating.

The only impacts will be the estimated cost of \$43,000 for the additional monitoring, recordkeeping and reporting requirements required by the final rule.

V. Statutory and Executive Order Reviews

A. <u>Executive Order 12866: Regulatory Planning and</u> Review

Under Executive Order 12866 (58 FR 51735,

October 4, 1993), the EPA must determine whether the regulatory action is "significant" and, therefore, subject to review by the Office of Management and Budget (OMB) and the requirements of the Executive Order. The Executive Order defines a "significant regulatory action" as one that is likely to result in a rule that may:

- (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;
- (2) create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) materially alter the budgetary impact of entitlement, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- (4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the

principles set forth in the Executive Order.

It has been determined that the final rule is not a "significant regulatory action" under the terms of Executive Order 12866, and is therefore not subject to OMB review.

B. Paperwork Reduction Act

The information collection requirements in the final rule have been submitted for approval to OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq (ICR 2098.02). The information collection requirements are not enforceable until OMB approves them.

The information requirements in the final rule are based on notification, recordkeeping, and reporting requirements in the NESHAP General Provisions (40 CFR part 63, subpart A), which are mandatory for all operators subject to NESHAP. The records and reports required by the final rule are necessary for EPA to identify major sources and new or reconstructed sources subject to the rule, ensure that MACT is being properly applied, and ensure that the emission control devices are being properly operated and maintained on a continuous basis. Based on the reported information, EPA can decide which plants, records, or processes should be inspected.

These recordkeeping and reporting requirements are specifically authorized by section 112 of the CAA (42 U.S.C. 7414). All information submitted to the EPA pursuant to the recordkeeping and reporting requirements for which a claim of confidentiality is made is safeguarded according to Agency policies in 40 CFR part 2, subpart B.

The annual average public reporting and recordkeeping burden for this collection of information over the first 3 years of the information collection request (ICR) is estimated to total 731 labor hours per year. This includes six responses per year from one respondent with an average of 122 hours per response. The total annualized cost burden to the facility is estimated at \$43,000, including labor, capital, and operation and maintenance. No additional capital cost for monitoring devices or annual costs for operation and maintenance costs are attributable to the final rule because the affected plant has already installed all continuous monitoring systems as a result of State requirements.

Burden means the total time, effort, or financial resources expended by persons to generate, maintain,

retain, or disclose or provide information to or for a

Federal agency. This includes the time needed to review
instructions; develop, acquire, install, and utilize
technology and systems for the purpose of collecting,
validating, and verifying information, processing and
maintaining information, and disclosing and providing
information; adjust the existing ways to comply with any
previously applicable instructions and requirements;
train personnel to respond to a collection of
information; search data sources; complete and review the
collection of information; and transmit or otherwise
disclose the information.

An Agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control number for EPA's regulations in 40 CFR part 63 are listed in 40 CFR part 9. When the ICR is approved by OMB, the Agency will publish a technical amendment to 40 CFR part 9 in the Federal Register to display the OMB control number for the approved information collection requirements contained in the final rule.

C. Regulatory Flexibility Act

The EPA has determined that it is not necessary to prepare a regulatory flexibility analysis in connection with the final rule. The EPA has also determined that the final rule will not have a significant economic impact on a substantial number of small entities. purposes of assessing the impacts of today's final rule on small entities, small entity is defined as: (1) a small business according to Small Business Administration (SBA) size standards for NAICS code 331419 (i.e., Primary Magnesium Refining) of 1,000 or fewer employees; (2) a small governmental jurisdiction that is a government of a city, county, town, school district or special district with a population of less than 50,000; and (3) a small organization that is any not-for-profit enterprise which is independently owned and operated and is not dominant in its field.

After considering the economic impacts of today's final rule on small entities, EPA has concluded that this action will not have a significant economic impact on a substantial number of small entities. Based on the above definition of small entities, no small entities are subject to the final rule and its requirements.

D. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, the EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures by State, local, and tribal governments, in the aggregate, or by the private sector, of \$100 million or more in any 1 year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires the EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective, or least-burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows the EPA to adopt an alternative other than the least-costly, most cost-effective, or least-burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted.

the EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

Today's final rule contains no Federal mandate (under the regulatory provisions of the UMRA) for State, local, or tribal governments. The EPA has determined that the final rule does not contain a Federal mandate that may result in estimated costs of \$100 million or more to either State, local, or tribal governments, in the aggregate, or to the private sector in any 1 year. The maximum total annual cost of the final rule for any year has been estimated to be less than \$48,000. Thus, the final rule is not subject to sections 202 and 205 of the UMRA. In addition, the EPA has determined that the final rule contains no regulatory requirements that might

significantly or uniquely affect small governments because it contains no requirements that apply to such governments or impose obligations upon them. Therefore, today's final rule is not subject to the requirements of section 203 of the UMRA.

E. Executive Order 13132: Federalism

Executive Order 13132 (64 FR 43255, August 10, 1999) requires EPA to develop an accountable process to ensure "meaningful and timely input by State and local officials in the development of regulatory policies that have federalism implications." "Policies that have federalism implications" is defined in the Executive Order to include regulations that have "substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government."

The final rule does not have federalism implications. It will not have substantial direct effects on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government, as specified in Executive

Order 13132. None of the affected facilities are owned or operated by State governments. Thus, Executive Order 13132 does not apply to the final rule.

F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments

Executive Order 13175 (65 FR 67249, November 6, 2000), requires the EPA to develop an accountable process to ensure "meaningful and timely input by tribal officials in the development of regulatory policies that have tribal implications."

The final rule does not have tribal implications, as specified in Executive Order 13175. It will not have substantial direct effects on tribal governments, on the relationship between the Federal government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes. No tribal governments own facilities subject to the final rule. Thus, Executive order 13175 does not apply to the final rule.

G. Executive Order 13045: Protection of Children from Environmental Health & Safety Risks

Executive Order 13045 (62 FR 19885, April 23, 1997) applies to any rule that: (1) Is determined to be

"economically significant," as defined under Executive Order 12866, and (2) concerns an environmental health or safety risk that EPA has reason to believe may have a disproportionate effect on children. If the regulatory action meets both criteria, the EPA must evaluate the environmental health or safety effects of the planned rule on children and explain why the planned regulation is preferable to other potentially effective and reasonably feasible alternatives considered by the Agency.

The EPA interprets Executive Order 13045 as applying only to those regulatory actions that are based on health or safety risks, such that the analysis required under section 5-501 of the Executive Order has the potential to influence the regulation. The final rule is not subject to Executive Order 13045 because it is based on technology and not on health or safety risks.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

The final rule is not subject to Executive Order 13211 (66 FR 28355, May 22, 2001) because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer Advancement Act

Section 12(d) of the National Technology Transfer and Advancement Act (NTTAA) of 1995 (Public Law 104-113; 15 U.S.C 272 note), directs the EPA to use voluntary consensus standards in their regulatory and procurement activities unless to do so would be inconsistent with applicable law or otherwise impracticable. Voluntary consensus standards are technical standards (such as material specifications, test methods, sampling procedures, business practices) developed or adopted by one or more voluntary consensus standard bodies. The NTTAA directs EPA to provide Congress, through annual reports to OMB, with explanations when an agency does not use available and applicable voluntary consensus standards.

The final rule involves technical standards.

Therefore, the EPA conducted a search to identify

potentially applicable voluntary consensus standards.

However, we identified no such standards as alternatives

to EPA Methods 1, 2, 2F, 2G, 3, 3A, 3B, 4, 5, 5D, 23, 26,

26A, 201, and 201A and none were brought to our

attention in comments. The search and review results are

available in Docket OAR-2002-0043.

J. <u>Congressional Review Act</u>

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. The EPA will submit a report containing the final rule and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the final rule in the Federal Register.

The final rule is not a "major rule rule" as defined by 5 U.S.C. 804(2).

NESHAP for Primary Magnesi33m Refining - page 33 of 76 List of Subjects in 40 CFR Part 64

Environmental protection, Air pollution control, Hazardous substances, Reporting and recordkeeping requirements.

Dated:		

Marianne Lamont Horinko, Acting Administrator. For the reasons stated in the preamble, title 40, chapter I, part 63 of the Code of the Federal Regulations is amended as follows:

PART 63 --[AMENDED]

1. The authority citation for part 63 continues to read as follows:

Authority: 42 U.S.C. 7401, et seq.

2. Part 63 is amended by adding subpart TTTTT to read as follows:

Subpart TTTT--National Emissions Standards for Hazardous
Air Pollutants for Primary Magnesium Refining
Sec.

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What This Subpart Covers

§63.9880 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for primary magnesium refineries. This subpart also establishes requirements to demonstrate initial and continuous compliance with all applicable emission limitations, work practice standards, and operation and maintenance requirements.

§63.9881 Am I subject to this subpart?

You are subject to this subpart if you own or operate a primary magnesium refinery that is (or is part

of) a major source of hazardous air pollutant (HAP) emissions. Your primary magnesium refinery is a major source of HAP if it emits or has the potential to emit any single HAP at a rate of 10 tons or more per year or any combination of HAP at a rate of 25 tons or more per year.

§63.9882 What parts of my plant does this subpart cover?

- (a) The affected sources are each new and existing primary magnesium refining facility.
- (b) This subpart covers emissions from each spray dryer stack, magnesium chloride storage bins scrubber stack, melt/reactor system stack, and launder off-gas system stack at your primary magnesium refining facility. This subpart also covers fugitive dust emissions.
- (c) Each primary magnesium refining facility is existing if you commenced construction or reconstruction of the affected source before January 22, 2003.
- (d) Each primary magnesium refining facility is new if you commence construction or reconstruction of the affected source on or after January 22, 2003. An affected source is reconstructed if it meets the definition of reconstruction in §63.2.

§63.9883 When do I have to comply with this subpart?

- (a) If you have an existing source, you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you no later than [INSERT DATE 1 YEAR AFTER DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER].
- (b) If you have a new affected source and its initial startup date is on or before [INSERT DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER], you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you by [INSERT DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER].
- (c) If you have a new affected source and its initial startup date is after [INSERT DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER], you must comply with each emission limitation, work practice standard, and operation and maintenance requirement in this subpart that applies to you upon initial startup.
- (d) If your primary magnesium refinery is an area source that becomes a major source of HAP, the compliance dates in paragraphs (d)(1) and (2) of this section apply

to you:

- (1) Any portion of the existing primary magnesium refinery that is a new affected source or a new reconstructed source must be in compliance with this subpart upon startup.
- (2) All other parts of the primary magnesium refinery must be in compliance with this subpart no later than 2 years after it becomes a major source.
- (e) You must meet the notification and schedule requirements in §63.9930. Several of these notifications must be submitted before the compliance date for your affected source.

Emission Limitations and Work Practice Standards <u>863.9890 What emission limitations must I meet?</u>

- (a) You must meet each emission limit in Table 1 to this subpart that applies to you.
- (b) For each wet scrubber applied to meet any particulate matter, particulate matter less than 10 microns (PM_{10}), chlorine, hydrochloric acid, or dioxins/furans emission limit in Table 1 to this subpart, you must maintain the hourly average pressure drop and scrubber liquid flow rate at or above the minimum level established during the initial or subsequent performance

test.

§63.9891 What work practice standards must I meet for my fugitive dust sources?

- (a) You must prepare and at all times operate according to a fugitive dust emissions control plan that describes in detail the measures that will be put in place to control fugitive dust emissions from all unpaved roads and other unpaved operational areas.
- (b) You must submit a copy of your fugitive dust emissions control plan for approval to the Administrator on or before the applicable compliance date for the affected source as specified in §63.9883. The requirement to operate according to the fugitive dust emissions control plan must be incorporated by reference in the source's operating permit issued by the permitting authority under 40 CFR part 70 or 40 CFR part 71.
- (c) You can use an existing fugitive dust emissions control plan provided it meets the requirements in paragraphs (c)(1) through (3) of this section.
- (1) The plan satisfies the requirements of paragraph (a) of this section.
- (2) The plan describes the current measures to control fugitive dust emission sources.

- (3) The plan has been approved as part of a State implementation plan or title V permit.
- (d) You must maintain a current copy of the fugitive dust emissions control plan on-site and available for inspection upon request. You must keep the plan for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

Operation and Maintenance Requirements §63.9900 What are my operation and maintenance requirements?

- (a) As required by §63.6(e)(1)(i), you must always operate and maintain your affected source, including air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.
- (b) You must prepare and operate at all times according to a written operation and maintenance plan for each control device subject to an operating limit in §63.9890(b). Each plan must address preventative maintenance for each control device, including a preventative maintenance schedule that is consistent with

the manufacturer's instructions for routine and long-term maintenance.

(c) You must maintain a current copy of the operation and maintenance plan required in paragraph (b) of this section on-site and available for inspection upon request. You must keep the plan for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.

General Compliance Requirements

§63.9910 What are my general requirements for complying with this subpart?

- (a) You must be in compliance with the emission limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in §63.2.
- (b) You must develop and implement a written startup, shutdown and malfunction plan according to the provisions in $\S63.6(e)(3)$.

Initial Compliance Requirements

§63.9911 By what date must I conduct performance tests or other initial compliance demonstrations?

(a) As required in §63.7(a)(2), you must conduct a

performance test to demonstrate initial compliance with each emission limit in Table 1 to this subpart that applies to you as indicated in paragraphs (a)(1) through (3) of this section:

- (1) Within 180 calendar days after the compliance date that is specified in §63.9883 for your existing affected source;
- (2) By [INSERT DATE 180 DAYS AFTER PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER] for a new source that has an initial startup date before [INSERT DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER]; or
- (3) Within 180 days after initial startup for a new source that has an initial startup date after [INSERT DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER].
- (b) For each operation and maintenance requirement that applies to you where initial compliance is not demonstrated using a performance test, you must demonstrate initial compliance within 30 calendar days after the compliance date that is specified for your affected source in §63.9883.
 - (c) If you commenced construction or reconstruction

between January 22, 2003 and [INSERT DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER], you must demonstrate initial compliance with either the proposed emission limitation or the promulgated emission limitation no later than [INSERT DATE 180 DAYS AFTER DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER] or no later than 180 calendar days after startup of the source, whichever is later, according to \$63.7(a)(2)(ix).

(d) If you commenced construction or reconstruction between January 22, 2003 and [INSERT DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER], and you chose to comply with the proposed emission limit when demonstrating initial compliance, you must conduct a second performance test to demonstrate compliance with the promulgated emission limit by [INSERT DATE 1 YEAR AND 180 DAYS AFTER DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER], or after startup of the source, whichever is later, according to §63.7(a)(2)(ix). §63.9912 When must I conduct subsequent performance tests?

You must conduct subsequent performance tests to demonstrate continuous compliance with all applicable

emission limits in Table 1 to this subpart no less frequently than twice (at mid-term and renewal) during each term of your title V operating permit.

§63.9913 What test methods and other procedures must I use to demonstrate initial compliance with the emission limits for particulate matter and PM_{10} ?

- (a) You must conduct each performance test that applies to your affected source according to the requirements in $\S63.7(e)(1)$.
- (b) To determine compliance with the applicable emission limits for particulate matter in Table 1 to this subpart, you must follow the test methods and procedures in paragraphs (b)(1) and (2) of this section.
- (1) Determine the concentration of particulate matter according to the following test methods in appendix A to 40 CFR part 60:
- (i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.
- (ii) Method 2, 2F, or 2G to determine the volumetric flow rate of the stack gas.
 - (iii) Method 3, 3A, or 3B to determine the dry

molecular weight of the stack gas.

- (iv) Method 4 to determine the moisture content of the stack gas.
- (v) Method 5 or 5D, as applicable, to determine the concentration of particulate matter.
- (vi) Method 201 or 201A, as applicable, to determine the concentration of PM_{10} .
- (2) Collect a minimum sample volume of 60 dry standard cubic feet (dscf) during each particulate matter or PM_{10} test run. Three valid test runs are needed to comprise a performance test.
- (c) Compute the mass emissions rate in pounds per hour (lbs/hr) for each test run using Equation 1 of this section:

$$E_{1bs/hr} = \frac{C_s \times Q_{std} \times 60}{7,000}$$
(Eq.1)

Where:

 $E_{\rm lbs/hr}$ = Mass emissions rate of particulate matter or PM_{10} (lbs/hr);

 C_s = Concentration of particulate matter or PM_{10} in the gas stream, grains per dry standard cubic feet (gr/dscf);

Q_{std} = Volumetric flow rate of stack gas, dry standard

cubic feet per minute (dscfm);

60 = Conversion factor, minutes per hour (min/hr); and 7,000 = Conversion factor, grains per pound (gr/lb).

§63.9914 What test methods and other procedures must I use to demonstrate initial compliance with chlorine and hydrochloric acid emission limits?

- (a) You must conduct each performance test that applies to your affected source according to the requirements in §63.7(e)(1).
- (b) To determine compliance with the applicable emission limits for chlorine and hydrochloric acid in Table 1 to this subpart, you must follow the test methods and procedures specified in paragraphs (b)(1) and (2) of this section.
- (1) Determine the concentration of chlorine and hydrochloric acid according to the following test methods in appendix A to 40 CFR part 60:
- (i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.
- (ii) Method 2, 2F, or 2G to determine the volumetric flow of the stack gas.
 - (iii) Method 3, 3A, or 3B to determine the dry

molecular weight of the stack gas.

- (iv) Method 4 to determine the moisture content of the stack gas.
- (v) Method 26 or 26A, as applicable, to determine the concentration of hydrochloric acid and chlorine.
- (2) Collect a minimum sample of 60 dscf during each test run for chlorine and hydrochloric acid. Three valid test runs are needed to comprise a performance test.
- (c) Compute the mass emissions rate (lbs/hr) for each test run using Equation 1 of this section:

$$E_{1bs/br} = \frac{C_s \times Q_{std} \times 60}{35.31 \times 454,000}$$
 (Eq.1)

Where:

 $E_{lbs/hr}$ = Mass emissions rate of chlorine or hydrochloric

acid (lbs/hr);

C_s = Concentration of chlorine or hydrochloric acid in the gas stream, milligrams per dry standard cubic meter (mg/dscm);

 Q_{std} = Volumetric flow rate of stack gas (dscfm);

60 = Conversion factor (min/hr);

35.31 = Conversion factor (dscf/dscm); and

454,000 = Conversion factor (mg/lb).

§63.9915 What test methods and other procedures must I use to demonstrate initial compliance with dioxin/furan emission limits?

- (a) You must conduct each performance test that applies to your affected source according to the requirements in $\S63.7(e)(1)$.
- (b) To determine compliance with the applicable emission limit for dioxins/furans in Table 1 to this subpart, you must follow the test methods and procedures specified in paragraphs (b)(1) and (2) of this section.
- (1) Determine the concentration of dioxin and furan according to the following test methods in appendix A to 40 CFR part 60:
- (i) Method 1 to select sampling port locations and the number of traverse points. Sampling ports must be located at the outlet of the control device and prior to any releases to the atmosphere.
- (ii) Method 2, 2F, or 2G to determine the volumetric flow of the stack gas.
- (iii) Method 3, 3A, or 3B to determine the dry molecular weight of the stack gas.
- (iv) Method 4 to determine the moisture content of the stack gas.
- (v) Method 23 to determine the concentration of dioxins/furans. For each dioxin/furan congener measured in accordance with this paragraph (b)(v), multiply the

congener concentration by its corresponding toxic equivalency factor specified in Table 2 of this subpart.

(2) Collect a minimum sample of 100 dscf during each test run. Three valid test runs are needed to comprise a performance test.

§63.9916 What test methods and other procedures must I use to establish and demonstrate initial compliance with the operating limits?

For a wet scrubber subject to operating limits for pressure drop and scrubber water flow rate in §63.9890(b), you must establish site-specific operating limits according to the procedures in paragraphs (a) and (b) of this section.

- (a) Using the continuous parameter monitoring system (CPMS) required in §63.9920, measure and record the pressure drop and scrubber water flow rate at least every 15 minutes during each run of the particulate matter performance test.
- (b) Compute and record the average pressure drop and scrubber water flow rate for each individual test run. Your operating limits are the lowest average individual pressure drop and scrubber water flow rate values in any of the three runs that meet the applicable

emission limit.

§63.9917 How do I demonstrate initial compliance with the emission limitations and work practice standards that apply to me?

- (a) For each affected source subject to an emission limit in Table 1 to this subpart, you have demonstrated initial compliance if:
- (1) You have met the conditions in Table 3 to this subpart; and
- (2) For each wet scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.9890(b), you have established appropriate sitespecific operating limits and have a record of the pressure drop and scrubber water flow rate measured during the performance test in accordance with §63.9916.
- (b) You have demonstrated initial compliance with the work practice standards in §63.9891 if you have certified in your notification of compliance status that:
- (1) You have prepared a fugitive dust emissions control plan according to the requirements in §63.9891 and submitted the plan for approval; and
- (2) You will operate according to the requirements in the plan.

§63.9918 How do I demonstrate initial compliance with the operation and maintenance requirements that apply to me?

You must demonstrate initial compliance by certifying in your notification of compliance status that you have met the requirements in paragraphs (a) and (b) of this section.

- (a) You have prepared the operation and maintenance plan according to the requirements in §63.9910; and
- (b) You will operate each control device according to the procedures in the plan.

Continuous Compliance Requirements

§63.9920 What are my continuous monitoring requirements?

For each wet scrubber subject to the operating limits for pressure drop and scrubber water flow rates in §63.9890(b), you must at all times monitor the hourly average pressure drop and liquid flow rate using a CPMS according to the requirements in §63.9921(a).

§63.9921 What are the installation, operation and maintenance requirements for my monitors?

(a) For each wet scrubber subject to the operating limits in §63.9890(b) for pressure drop and scrubber water flow rate, you must install, operate, and maintain

each CPMS according to the requirements in paragraphs (a)(1) and (2) of this section.

- (1) For the pressure drop CPMS, you must:
- (i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure and that minimizes or eliminates pulsating pressure, vibration, and internal and external corrosion.
- (ii) Use a gauge with a minimum measurement sensitivity of 0.5 inch of water or a transducer with a minimum measurement sensitivity of 1 percent of the pressure range.
 - (iii) Check the pressure tap for pluggage daily.
- (iv) Using a manometer, check gauge calibration quarterly and transducer calibration monthly.
- (v) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range, or install a new pressure sensor.
- (vi) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.
- (2) For the scrubber water flow rate CPMS, you must:
 - (i) Locate the flow sensor and other necessary

equipment in a position that provides a representative flow and that reduces swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

- (ii) Use a flow sensor with a minimum measurement sensitivity of 2 percent of the flow rate.
- (iii) Conduct a flow sensor calibration check at least semiannually according to the manufacturer's instructions.
- (iv) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.
- (b) You must install, operate, and maintain each CPMS for a wet scrubber according to the requirements in paragraphs (b)(1) through (3) of this section.
- (1) Each CPMS must complete a minimum of one cycle of operation for each successive 15-minute period.
- (2) Each CPMS must have valid data for at least 95 percent of every averaging period.
- (3) Each CPMS must determine and record the hourly average of all recorded readings.

§63.9922 How do I monitor and collect data to demonstrate continuous compliance?

- (a) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including as applicable, calibration checks and required zero and span adjustments), you must monitor continuously (or collect data at all required intervals) at all times an affected source is operating.
- (b) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels or to fulfill a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing compliance.
- (c) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.
- §63.9923 How do I demonstrate continuous compliance with the emission limitations and work practice standards that apply to me?
- (a) For each affected source subject to an emission limit in Table 1 to this subpart, you must demonstrate

continuous compliance according to the requirements in Table 4 to this subpart.

- (b) For each wet scrubber subject to the operating limits for pressure drop and scrubber water flow rate in §63.9890(b), you must demonstrate continuous compliance according to the requirements in paragraphs (b)(1) and (2) of this section.
- (1) Collecting and reducing the monitoring data according to §63.9921(b); and
- (2) Maintaining the hourly average pressure drop and scrubber water flow rate at or above the minimum level established during the initial or subsequent performance.
- (c) You must demonstrate continuous compliance with the work practice standards in §63.9891 by operating according to the requirements in your fugitive dust emissions control plan and recording information needed to document conformance with the requirements.

§63.9924 How do I demonstrate continuous compliance with the operation and maintenance requirements that apply to me?

For each emission point subject to an emission limit in Table 1 to this subpart, you must demonstrate

continuous compliance with the operation and maintenance requirements in §63.9900 by performing preventive maintenance for each control device according to §63.9900(b) and recording all information needed to document conformance with these requirements.

§63.9925 What other requirements must I meet to demonstrate continuous compliance?

- (a) <u>Deviations</u>. You must report each instance in which you did not meet each emission limitation in §63.9890 or work practice standard in §63.9891 that applies to you. This includes periods of startup, shutdown, and malfunction. You must also report each instance in which you did not meet each operation and maintenance requirement required in §63.9900 that applies to you. These instances are deviations from the emission limitations, work practice standards, and operation and maintenance requirements in this subpart. These deviations must be reported according to the requirements in §63.9931.
- (b) <u>Startups, shutdowns, and malfunctions</u>. During periods of startup, shutdown, and malfunction, you must operate in accordance with your startup, shutdown, and malfunction plan.

- (1) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of startup, shutdown, or malfunction are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with the startup, shutdown, and malfunction plan.
- (2) The Administrator will determine whether deviations that occur during a period of startup, shutdown, or malfunction are violations, according to the provisions in $\S63.6(e)$.

Notifications, Reports, and Records §63.9930 What notifications must I submit and when?

- (a) You must submit all of the notifications in $\S\S63.7(b)$ and (c), 63.8(f)(4), 63.9(b), and 63.9(h) that apply to you by the specified dates.
- (b) As specified in §63.9(b)(2), if you startup your affected source before [INSERT DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER], you must submit your initial notification no later than [INSERT DATE 120 DAYS AFTER DATE OF PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER].
- (c) As specified in §63.9(b)(3), if you start your new affected source on or after [INSERT DATE OF

PUBLICATION OF THIS FINAL RULE IN THE FEDERAL REGISTER], you must submit your initial notification no later that 120 calendar days after you become subject to this subpart.

- (d) If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in \$63.7(b)(1).
- (e) If you are required to conduct a performance test or other initial compliance demonstration, you must submit a notification of compliance status according to §63.9(h)(2)(ii), and the requirements in paragraphs (e)(1) and (2) of this section:
- (1) For each initial compliance demonstration that does not include a performance test, you must submit the notification of compliance status before the close of business on the 30th calendar day following completion of the initial compliance demonstration.
- (2) For each initial compliance demonstration that does include a performance test, you must submit the notification of compliance status, including the performance test results, before the close of business on

the 60th calendar day following the completion of the performance test according to §63.10(d)(2).

§63.9931 What reports must I submit and when?

- (a) Compliance report due dates. Unless the Administrator has approved a different schedule, you must submit a semiannual compliance report to your permitting authority according to the requirements in paragraphs (a)(1) through (5) of this section.
- (1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.9883 and ending on June 30 or December 31, whichever date comes after the compliance date that is specified for your source in §63.9883.
- (2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date comes first after your compliance report is due.
- (3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
 - (4) Each subsequent compliance report must be

postmarked or delivered no later than July 31 or January 31, whichever date comes first after the end of the semiannual reporting period.

- (5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (a)(1) through (4) of this section.
- (b) <u>Compliance report contents</u>. Each compliance report must include the information in paragraphs (b)(1) through (3) of this section and, as applicable, paragraphs (b)(4) through (8) of this sections.
 - (1) Company name and address.
- (2) Statement by a responsible official, with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
 - (3) Date of report and beginning and ending dates

of the reporting period.

- (4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in $\S63.10(d)(5)(i)$.
- (5) If there were no deviations from the continuous compliance requirements in §§63.9923 and 63.9924 that apply to you, a statement that there were no deviations from the emission limitations, work practice standards, or operation and maintenance requirements during the reporting period.
- (6) If there were no periods during which a CPMS was out-of-control as specified in §63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.
- (7) For each deviation from an emission limitation in §63.9890 that occurs at an affected source where you are not using a CPMS to comply with an emission limitation in this subpart, the compliance report must contain the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(7)(i) and (ii) of this section. This includes

periods of startup, shutdown, and malfunction.

- (i) The total operating time of each affected source during the reporting period.
- (ii) Information on the number, duration, and cause of deviations (including unknown cause, if applicable) as applicable and the corrective action taken.
- (8) For each deviation from an emission limitation occurring at an affected source where you are using a CPMS to comply with the emission limitation in this subpart, you must include the information in paragraphs (b)(1) through (4) of this section and the information in paragraphs (b)(8)(i) through (xi) of this section. This includes periods of startup, shutdown, and malfunction.
- (i) The date and time that each malfunction started and stopped.
- (ii) The date and time that each continuous monitoring was inoperative, except for zero (low-level) and high-level checks.
- (iii) The date, time, and duration that each continuous monitoring system was out-of-control, including the information in $\S63.8(c)(8)$.
- (iv) The date and time that each deviation started and stopped, and whether each deviation occurred during a

period of startup, shutdown, or malfunction or during another period.

- (v) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.
- (vi) A breakdown of the total duration of the deviations during the reporting period including those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
- (vii) A summary of the total duration of continuous monitoring system downtime during the reporting period and the total duration of continuous monitoring system downtime as a percent of the total source operating time during the reporting period.
 - (viii) A brief description of the process units.
- (ix) A brief description of the continuous monitoring system.
- (x) The date of the latest continuous monitoring system certification or audit.
- (xi) A description of any changes in continuous monitoring systems, processes, or controls since the last

reporting period.

- report. If you had a startup, shutdown, and malfunction during the semiannual reporting period that was not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report according to the requirements in §63.10(d)(5)(ii).
- Part 70 monitoring report. If you have (d) obtained a title V operating permit for an affected source pursuant to 40 CFR part 70 or 40 CFR part 71, you must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If you submit a compliance report for an affected source along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report includes all the required information concerning deviations from any emissions limitation, work practice standards, or operation and maintenance requirement in this subpart, submission of the compliance report satisfies any obligation to report the same deviations in the

semiannual monitoring report. However, submission of the compliance report does not otherwise affect any obligation you may have to report deviations from permit requirements for an affected source to your permitting authority.

§63.9932 What records must I keep?

- (a) You must keep the records as indicated in paragraphs (a)(1) through (3) of this section:
- (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any initial notification or notification of compliance status that you submitted, according to the requirements in $\S63.10(b)(2)(xiv)$.
- (2) The records in §63.6(e)(3)(iii) through (v)
 related to startup, shutdown, and malfunction.
- (3) Records of performance tests and performance evaluations as required in §63.10(b)(2)(viii).
- (b) You must keep the records required in §§63.9932 and 63.9933 to show continuous compliance with each emission limitation, work practice standard, and operating and maintenance requirement that applies to you.

§63.9933 In what form and how long must I keep my

records?

- (a) Your records must be in a form suitable and readily available for expeditious review, according to $\S63.10(b)(1)$.
- (b) As specified in §63.10(b)(1), you must keep
 each record for 5 years following the date of each
 occurrence, measurement, maintenance, corrective action,
 report, or record.
- (c) You must keep each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record according to §63.10(b)(1). You can keep the records off site for the remaining 3 years.
- (d) You must keep your fugitive dust emissions control plan and your operation and maintenance plan onsite according to the requirements in §§63.9891(d) and 63.9900(c).

Other Requirements and Information §63.9940 What parts of the General Provisions apply to me?

Table 4 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you. §63.9941 Who implements and enforces this subpart?

- (a) This subpart can be implemented and enforced by us, the United States Environmental Protection Agency (U.S. EPA) or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator of the EPA and are not transferred to the State, local, or tribal agency.
- (c) The authorities that will not be delegated to State, local, or tribal agencies are specified in paragraphs (c)(1) through (4) of this section.
- (1) Approval of alternatives to the non-opacity emission limitations in §63.9890 and work practice standards in §63.9891 under §63.6(g).
- (2) Approval of major alternatives to test methods under $\S63.7(e)(2)(ii)$ and (f) and as defined in $\S63.90$.

- (3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.
- (4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90. §63.9942 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in §63.2, and in this section as follows:

Chlorine plant bypass scrubber means the wet scrubber that captures chlorine gas during a chlorine plant shut down or failure.

<u>Deviation</u> means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

- (1) Fails to meet any requirement or obligation established by this subpart, including but not limited to any emission limitation (including operating limits) or operation and maintenance requirement;
- (2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
- (3) Fails to meet any emission limitation in this subpart during startup, shutdown, or malfunction,

regardless of whether or not such failure is permitted by this subpart.

Emission limitation means any emission limit,
opacity limit, or operating limit.

Launder off-gas system means a system that collects chlorine and hydrochloric acid fumes from collection points within the melt/reactor system building. The system then removes particulate matter and hydrochloric acid from the collected gases prior to discharge to the atmosphere.

Magnesium chloride storage bins means vessels that store dried magnesium chloride powder produced from the spray drying operation.

Melt/reactor system means a system that melts and chlorinates dehydrated brine to produce high purity molten magnesium chloride feed for electrolysis.

Primary magnesium refining means the production of magnesium metal and magnesium metal alloys from natural sources of magnesium chloride such as sea water or water from the Great Salt Lake and magnesium bearing ores.

Responsible official means responsible official as defined in §63.2.

Spray dryer means dryers that evaporate brine to

form magnesium powder by contact with high temperature gases exhausted from gas turbines.

Wet scrubber means a device that contacts an exhaust gas with a liquid to remove particulate matter and acid gases from the exhaust. Examples are packed-bed wet scrubbers and venturi scrubbers.

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the Clean Air Act.

Tables to Subpart TTTTT of Part 63

Table 1 to Subpart TTTTT of Part 63--Emission Limits

As required in §63.9890(a), you must comply with each applicable emission limit in the following table:

For		You must comply with each of the following		
1.	Each spray dryer stack	a. b.	You must not cause to be discharged to the atmosphere any gases that contain particulate matter in excess of 100 lbs/hr; and You must not cause to be discharged to the atmosphere any gases that contain hydrochloric acid in excess of 200 lbs/hr.	
2.	Each magnesium chloride storage bins scrubber stack	a. b.	You must not cause to be discharged to the atmosphere any gases that contain hydrochloric acid in excess of 47.5 lbs/hr and 0.35 gr/dscf; and You must not cause to be discharged to the atmosphere any gases that contain PM ₁₀ in excess of 2.7 lbs/hr and 0.016 gr/dscf.	

3.	Each melt/reactor system stack	a.	You must not cause to be discharged to the atmosphere any gases that contain PM_{10} in excess of 13.1 lbs/hr; and
		b.	You must not cause to be discharged to the atmosphere any gases that contain hydrochloric acid in excess of 7.2 lbs/hr; and
		c.	You must not cause to be discharged to the atmosphere any gases that contain chlorine in excess of 100 lbs/hr; and
		d.	You must not cause to be discharged to the atmosphere any gases that contain 36 ng TEQ/dscm corrected to 7% oxygen.
4.	Each launder off-gas system stack	a.	You must not cause to be discharged to the atmosphere any gases that contain particulate matter in excess of 37.5 lbs/hr; and
		b.	You must not cause to be discharged to the atmosphere any gases that contain hydrochloric acid in excess of 46.0 lbs/hr; and
		С.	You must not cause to be discharged to the atmosphere any gases that contain chlorine in excess of 26.0 lbs/hr.

Table 2 to Subpart TTTTT of Part 63--Toxic Equivalency Factors

Dioxin/Furan Congener	Toxic Equivalency Factor
2,3,7,8-tetrachlorinated dibenzo-p-dioxin	1
1,2,3,7,8-pentachlorinated dibenzo-p-dioxin	1
1,2,3,4,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorinated dibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzo-p-dioxin	0.01
octachlorinated dibenzo-p-dioxin	0.0001
2,3,7,8-tetrachlorinated dibenzofuran	0.1
2,3,4,7,8-pentachlorinated dibenzofuran	0.5
1,2,3,7,8-pentachlorinated dibenzofuran	0.05
1,2,3,4,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,7,8,9-hexachlorinated dibenzofuran	0.1
2,3,4,6,7,8-hexachlorinated dibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorinated dibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorinated dibenzofuran	0.01
octachlorinated dibenzofuran	0.0001

Table 3 to Subpart TTTTT of Part 63--Initial Compliance with Emission Limits

As required in 63.9916, you must demonstrate initial compliance with the emission limits according to the following table:

For You have demonstrated initial compliance if			
1.	Each spray dryer stack	b.	The average mass flow of particulate matter from the control system applied to emissions from each spray dryer, measured according to the performance test procedures in §63.9913(c), did not exceed 100 lbs/hr; and The average mass flow of hydrochloric acid from the control system applied to emissions from each spray dryer, determined according to the performance test procedures in §63.9914(c), did not exceed 200 lbs/hr.
2.	Each magnesium chloride storage bins scrubber stack	b.	The average mass flow of hydrochloric acid from the control system applied to the magnesium chloride storage bins scrubber exhaust, measured according to the performance test procedure in §63.9914, did not exceed 47.5 lbs/hr and 0.35 gr/dscf; and The average mass flow of PM ₁₀ from the control system applied to the magnesium chloride storage bins scrubber exhaust, determined according to the performance test procedures in §63.9913, did not exceed 2.7 lbs/hr and 0.016 gr/dscf.

3. Each
 melt/reactor
 system stack

- a. The average mass flow of PM_{10} from the control system applied to the melt/reactor system exhaust, measured according to the performance test procedures in §63.9913, did not exceed 13.1 lbs/hr; and
- b. The average mass flow of hydrochloric acid from the control system applied to the melt/reactor system exhaust, measured according to the performance test procedures in §63.9914, did not exceed 7.2 lbs/hr; and
- c. The average mass flow of chlorine from the control system applied to the melt/reactor system exhaust, measured according to the performance test procedures in §63.9914, did not exceed 100 lbs/hr.
- d. The average concentration of dioxins/furans from the control system applied to the melt/reactor system exhaust, measured according to the performance test procedures in §63.9915, did not exceed 36 ng TEQ/dscm corrected to 7% oxygen.

4. Each launder off-gas system stack

- a. The average mass flow of particulate matter from the control system applied to the launder off-gas system collection system exhaust, measured according to the performance test procedures in §63.9913, did not exceed 37.5 lbs/hr; and
- b. The average mass flow of hydrochloric acid from the control system applied to the launder off-gas system collection system exhaust, measured according to the performance test procedures in §63.9914, did not exceed 46.0 lbs/hr; and
- c. The average mass flow of chlorine from the control system applied to the launder off-gas system collection system exhaust, measured according to the performance test procedures in §63.9914, did not exceed 26.0 lbs/hr.

Table 4 to Subpart TTTTT of Part 63--Continuous Compliance with Emission Limits

As required in §63.9923, you must demonstrate continuous compliance with the emission limits according to the following table:

	For	You must demonstrate continuous compliance by		
1.	Each spray dryer stack	 a. Maintaining emissions of PM₁₀ at or below 100 lbs/hr; and b. Maintaining emissions of hydrochloric acid at or below 200 lbs/hr; and 		
		c. Conducting subsequent performance tests at least twice during each term of your title V operating permit (at mid-term and renewal).		
2.	Magnesium chloride storage bins scrubber stack	 a. Maintaining emissions of hydrochloric acid at or below 47.5 lbs/hr and 0.35 gr/dscf; and b. Maintaining emissions of PM₁₀ at or below 2.7 lbs/hr and 0.016 gr/dscf; and 		
		c. Conducting subsequent performance tests at least twice during each term of your title V operating permit (at mid-term and renewal).		

		1	
3.	Each melt/reactor system stack	a. b. c. d.	performance test at least
			<pre>twice during each term of your title V operating permit (at mid-term and renewal).</pre>
4.	Each launder off-gas system stack	a.	Maintaining emissions of particulate matter at or below 37.5 lbs/hr; and
		b.	Maintaining emissions of hydrochloric acid at or below 46.0 lbs/hr; and
		C.	Maintaining emissions of chlorine at or below 26.0 lbs/hr; and
		d.	Conducting subsequent performance tests at least twice during each term of your title V operating permit (at mid-term and renewal).

Table 5 to Subpart TTTTT of Part 63--Applicability of General Provisions to Subpart TTTTT of Part 63

As required in §63.9950, you must comply with the requirements of the NESHAP General Provisions (40 CFR part 63, subpart A) shown in the following table:

Citation	Subject	Applies to Subpart TTTTT	Explanation
63.1	Applicability	Yes.	
63.2	Definitions	Yes.	
63.3	Units and Abbreviations	Yes.	
63.4	Prohibited Activities	Yes.	
63.5	Construction and Reconstruction	Yes.	
63.6(a)-(g)	Compliance with Standards and Maintenance Requirements	Yes.	
63.6(h)	Determining Compliance with Opacity and Visible Emission standards	No.	
63.6(i)-(j)	Extension of Compliance and Presidential Compliance Exemption	Yes.	

63.7(a)(1)-(2)	Applicability and Performance Test Dates	No	Subpart TTTTT specifies performance test applicability and dates.
63.7(a)(3), (b)-(h)	Performance Testing Requirements	Yes.	
63.8 except for (a)(4),(c)(4),			
and (f)(6)	Monitoring Requirements	Yes.	
63.8(a)(4)	Additional Monitoring Requirements for Control Devices in §63.11	No	Subpart TTTTT does not require flares.
63.8(c)(4)	Continuous Monitoring System Requirements	No	Subpart TTTTT specifies requirements for operation of CMS.
63.8(f)(6)	Relative Accuracy Test Alternative (RATA)	No	Subpart TTTTT does not require continuous emission monitoring systems.
63.9	Notification Requirements	Yes.	
63.9(g)(5)	Data Reduction	No	Subpart TTTTT specifies data reduction requirements.

63.10 except for(b)(2)(xiii) and (c)(7)-(8)	Recordkeeping and Reporting Requirements	Yes.	
63.10(b)(2)			
(xiii)	Continuous Monitoring System (CMS) Records for RATA Alternative	No	Subpart TTTTT does not require continuous emission monitoring systems.
63.10(c)(7)-(8)	Records of Excess Emissions and Parameter Monitoring Accedences for CMS	No	Subpart TTTTT specifies recordkeepin g requirements.
63.11	Control Device Requirements	No	Subpart TTTTT does not require flares.
63.12	State Authority and Delegations	Yes.	
63.13-63.15	Addresses, Incorporation by Reference, Availability of Information	Yes.	